

ABSTRACT

A plasma generating electrode 1 of the invention includes at least a pair of electrodes 5, at least one electrode 5a of the pair of electrodes 5 including a plate-like ceramic body 2 as a dielectric and a plurality of conductive films 3 disposed in the
5 ceramic body 2 and each having a plurality of through-holes 4 formed through the ceramic body 2 and each having a plurality of through-holes 4 formed through the conductive film 3 in its thickness direction in a predetermined arrangement pattern, the through-holes 4 having a cross-sectional shape including an arc shape along a plane perpendicular to the thickness direction, an arrangement pattern of the through-holes 4a
10 formed in at least one conductive film 3a being different from an arrangement pattern of the through-holes 4b formed in the other conductive film 3b. The plasma generating electrode 1 is capable of simultaneously generating different states of plasma upon application of voltage between the pair of electrodes 5 due to the different arrangement patterns of the through-holes 4 in the conductive films 3.